

Dkt. 60084-A-PCT-US/JPW/SHS

THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Stephen P. Goff and Gilda Tachedjian

Serial No.: 10/009,433 Examiner:

Filed: November 8, 2001 Group Art Unit:

For : TWO-HYBRID ASSAY THAT DETECTS HIV-1 REVERSE

TRANSCRIPTASE DIMERIZATION

1185 Avenue of the Americas New York, New York 10036 January 23, 2002

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

INFORMATION DISCLOSURE STATEMENT

In accordance with their duty of disclosure under 37 C.F.R. §1.56, applicants direct the Examiner's attention to the following references which are listed on PTO-1449 form attached hereto as Exhibit A. A copy of below listed reference 36 is attached hereto as Exhibit 1.

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- 2. Becerra, S., et al., (1991) "Protein-Protein Interactions of HIV-1 Reverse Transcriptase: Implication of Central and C-terminal Regions in Subunit Binding", <u>Biochemistry</u>, 30:11707-11719;
- 3. Debyser, Z. and De Clerq, E. (1996) "Chemical Crosslinking of the Subunits of HIV-1 Reverse Transcriptase", Protein Science, 5:278-286;

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- 5. Ding, J. et al., (1995) "Structure of HIV-1 RT/TIBO R 86183

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- 7. Divita, G., et al., (1994) "Inhibition of Human Immunodeficiency Virus Type 1 Reverse Transcriptase Dimerization Using Synthetic Peptides Derived from the Connection Domain", <u>J.Biol.Chem.</u>, 269:13080-13083;
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- 9. Fields, S., and Song, O. (1989) "A Novel Genetic System to Detect Protein-Protein Interaction", Nature, 340:245-246;
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- 14. Hanes, S.D. and Brent, R. (1989) "DNA Specificity of the Bicoid Activator Protein is Determined by Homeodomain Recognition Helix Residue 9", Cell, 57:1275-1283;
- 15. Huang, H., et al. (1998) "Structure of a Covalently Trapped Catalytic Complex of HIV-1 Reverse Transcriptase: Implication for Drug Resistance", Science, 282:1669-1675;
- 16. Jacobo-Molina, A. et al. (1993) "Crystal Structure of Human Immunodeficiency Virus Type 1 Reverse Transcriptase Complexed With Double-Stranded DNA at 3.0 a Resolution shows Bent DNA", <u>J.Biol.Chem.</u>, 269:1388-1393;
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- 19. Kaplana, G.V. and Goff, S.P., (1993) "Genetic Analysis of Homeric Interactions of Human Immunodeficiency Virus Type

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- 24. Luban, J. et al., (1992) "Genetic Assay for Multimerization of Retroviral gag Polyproteins", <u>J. Virol.</u> 66:5157-5160;
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- 30. Ren, J., et al., (1995) "The Structure of HIV-1 Reverse Transcriptase Complexed with 89-chloro-TIBO: Lessons for Inhibitor Design", Structure, 3:915-926;
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- 32. Rodgers, D.W., et al. (1995) "The Structure of Unliganded Reverse Transcriptase from the Human Immunodeficiency Virus Type 1", Proc. Natl. Acad. Sci. USA, 92:1222-1226;
- 33. Ruden, D. M., et al. (1991) "Generating Yeast Transcriptional Activators Containing no Yeast Protein Sequences", Nature, 350:250-252;
- Sluis-Cremer, N., et al., (2000) "Human Immunodeficiency Virus Type 1 Reverse Transcriptase Dimer Destabilization by 1-{Spiro[4"-amino-2", 2"-dioxo-1", 2"-oxathiole-5", 3'-[2', 5'-bis-o-(tert-butyldimethylsiyl)-§-D-ribofuranosyl]]}-3-

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36. U.S. Patent No. 5,922,856,A (Fritz, et al.), July 13, 1999,
 (Exhibit 1).

The subject application is a National Stage Application filed under 35 U.S.C.§371 of PCT/US01/18339, filed June 6, 2001, which is a continuation-in-part of U.S. Serial No. 09/588,939, filed June 6, 2000.

above listed references 1-35 were submitted to and considered by the United States Patent and Trademark Office in an Information Disclosure Statement filed January 22, 2001 in connection with U.S. Serial No. 09/588,939. Accordingly, under 37 C.F.R. §1.98(d) copies of these references are not required to be provided to the United States Patent and Trademark Office, since they were previously cited by, or submitted to, the United States Patent and Trademark Office in an application relied upon earlier filing date under 35 U.S.C. §120. International Search Report was issued on October 25, 2001 in connection with PCT/US01/18339. A copy of this search report is attached as Exhibit B. The above-listed references 9, 21, 28, 24, 36 were cited in the search report. A copy of reference 36 is attached hereto as Exhibit 1.

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If a telephone conference would be of assistance in advancing the prosecution of the subject application, applicants' undersigned attorney invites the Examiner to telephone at the number provided below.

Pursuant to 37 C.F.R. §1.97(b)(3), no fee, is deemed necessary in connection with the filing of this Information Disclosure Statement. However, if any additional fee is required, authorization is hereby given to charge the amount of any such fee to Deposit Account No. 03-3125.

Respectfully submitted,

I hereby certify that this correspondence is being deposited this date with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231.

1-23-02

Date

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